THE BIG GUNS!

A FEW FACTS,

Comprising the Naval Actions of the United States' Navy.

SHIP BUILDING—MANNING THE NAVY,

And style of Vessel adapted to the necessities of America.

RESPECTFULLY ADDRESSED TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES.—BY A FRIEND OF PEACE.

"In time of Peace, prepare for War."—WASHINGTON.

From the reign of Queen Elizabeth, to 1812, the British flag floated victorious on every ocean and sea. It was not, until their encounters with American ships, that the flag of "brave old England" was lowered. It is the intention of the author of this paper, to show the cause of the American victories over the English and French vessels they encountered, in entering into the causes of American victories and defeats on the ocean, the author asserts in the premises. *It was altogether owing to the American ships having heavy batteries, while their opponents had light*, and that whenever an American vessel was captured, it was owing to her antagonist HAVING A HEAVIER BATTERY, THAN THE AMERICAN FRIGATE.

In the engagement between the Frigates United States and Macedonian, the United States carried the following armament:

	Rated.	Mounting.	Calibre of Guns.		Calibre of Guns.		Tons.
United States,	44	54	32 long	24 pounders.	22 canonades	32 pounders.	1500.
Macedonian,	36	44	30 "	18 "	14 "	32 "	1300.
	—	—	—	—	—	—	——
Difference,	8	10	2	6	8	00	200.

In the action between the Constitution and Guerriere, the same difference in gun and metal existed—and in the battle between the United States and Macedonian; we find the same difference, viz:
United States, as shewn above.

	Rated.	Mounting.	Calibre of Guns.		Calibre of Guns.		Tons.
Java,	36	46	28	18 pounders.	18 canonades	32 pounders.	1400.

In the action between the Shannon and Chesapeake, when the latter surrendered to the former; we find the Shannon the heavier mettled ship.

	Rated.	Mounting.	Calibre of Guns.		Calibre of Guns.	
Shannon,	36	52	32 long	24 pounders.	20 canonades	32 pounders.
Chesapeake,	36	36	18 "	18 "	18 "	24 "

By reference to the force of the Frigate Constellation and the Vengence, we find the following difference, viz:

	Rated.	Mounting.	Calibre of Guns.	Calibre of Guns.
Constellation,	32	40	28 long 18 pounders.	12 canonades 24 pounders.
Vengence,			28 " 18 "	16 " 12 & 8 canonades 42 pds.

The difference in weight of metal between these two ships was about 240 pounds, but the Constellation had the advantage over the Vengence, in having twelve 24 pounder long guns, and the Vengence the advantage of 8 canonades of 42 pounders. This was a night action, and the discipline was on the side of the Americans. Yet, in this action, by the official account, the Vengence escaped with a large number of her crew killed, but the Constellation lost her mainmast and was much cut up in rigging and hull--the 42 pounders of the Vengence, therefore, gave that ship a vast advantage of the Constellation, and the latter ship might well claim the victory over her antagonist, if she had only beaten her off. The Vengence escaped and got safe into port. In the action between the Hornet and Peacock, the first had the advantage over the last, in having a heavy battery viz:

Hornet,	16 Canonades,	32 Pounders.	2 long	18 pounders.
Peacock,	16 "	24 "	2 "	9 "

It will be unnecessary here, to state more than the above facts, to prove that in every instance, where the battery of the ship were the heaviest, that is, carried the largest shot, that ship was the victor. We find the Shannon a heavier batteried ship than the Chesapeake, and the latter surrendered to her antagonist. We find the Constitution a heavier batteried ship than the Java, and the latter surrendered to the former. We, therefore, should look at the effects for such causes and profit by them. The British, always alive to their own interest, and profits by defeat, more than any other nation in the world, have divined the causes of their defeats in the late American war, and have substituted for their old class 18 pounder frigate, a new class ship, as far superior to the United States and Constitution, in size and battery, as those ships were in size and battery to the Macedonian and Java. For a full description of this new class vessel, I refer you to Miles' Royal Navy of England, now in the Library of Congress.

I have in vain looked over the history of Naval Battles, to find a single instance, where an 18 pounder frigate defeated a 24 pounder frigate and made prize of her. Instances are on record, where an 18 pounder frigate beat off and escaped from a 24 pounder frigate, but no where can you find the light batteried ship capturing the heavy batteried ship. The object of the author is to urge on the Congress of the United States, the necessity of placing on the Government vessels heavy batteries, to carry a shot of not less than 68 pounds—to show this, let us see what would be the effect of altering the vessels of the navy to carry the gun here proposed.

	Mounting.	Calibre.	Weight of Metal at two Broadsides.
Pennsylvania,	140	32 pounder.	4480.

Let us now remove the upper deck of this ship, and reduce her number of guns to 100—68 pounders, this would be taken from the ship, in actual weight, over 200 tons, and raise her about 8 inches higher out of the water. The ship would then stand, as follows:

	Mounting.	Calibre,	Weight of Metal at two Broadsides.	
Pennsylvania,	100	68 pounders.	6800	
Not Altered,	140	32 "	4480	"
Difference,	40	36	2320	

Difference in favour of the alteration, in weight of metal, 2320 pounds. The ship would be more buoyant and require less men and officers. Let us then take the Whole Navy, and place on them the batteries here proposed, and see the difference:

Pennsylvania,	100.	68 pounders.	Equal to	200.	32 pounders.
Brandywine	30.	68 "	"	66.	32 "
Franklin,	50.	68 "	"	100.	32 "
Ohio,	60.	68 "	"	120.	32 "
Delaware,	60.	68 "	"	120.	32 "
North Carolina,	60.	68 "	"	120.	32 "
New York,	60.	68 "	"	120.	32 "
Columbus,	60.	68 "	"	120.	32 "
Independence,	30.	68 "	"	60.	32 "
Alabama,	60.	68 "	"	120.	32 "
Vermont,	60.	68 "	"	120.	32 "
Virginia,	60.	68 "	"	120.	32 "
New Orleans,	60.	68 "	"	120.	32 "
United States,	30.	68 "	"	60.	32 "
Constitution,	30.	68 "	"	60.	32 "
Potomac,	30.	68 "	"	60.	32 "
Colombia,	30.	68 "	"	60.	32 "
Savanah,	30.	68 "	"	60.	32 "
Santre,	30.	68 "	"	60.	32 "
St. Lawrence,	30.	68 "	"	60.	32 "
Macedonian,	18.	68 "	"	36.	32 "
John Adams,	10.	68 "	"	20.	32 "
Vincennes,	10.	68 "	"	28.	32 "
Falmouth,	10.	68 "	"	20.	32 "
Vandalia,	10.	68 "	"	20.	32 "
Cyane,	12.	68 "	"	24.	32 "
Portsmouth,	14.	68 "	"	28.	32 "
St. Mary's,	14.	68 "	"	28.	32 "
Albany,	14.	68 "	"	28.	32 "
Ontario,	8.	68 "	"	14.	32 "
Congress,	30.	68 "	"	60.	32 "
Cumberland,	30.	68 "	"	60.	32 "
Raritan,	30.	68 "	"	60.	32 "
Sabine,	30.	68 "	"	60.	32 "
Constellation,	18.	68 "	"	36.	32 "
Saratoga,	10.	68 "	"	20.	32 "
Boston,	10.	68 "	"	20.	32 "
Warren,	10.	68 "	"	20.	32 "
Fairfield,	10.	68 "	"	20.	32 "
St. Louis,	10.	68 "	"	20.	32 "
Le Vant,	12.	68 "	"	24.	32 "

Plymouth,	14. 68	"	"	28. 32	"
Jamestown,	16. 65	"	"	32. 32	"
Germantown,	14. 68	"	"	28. 32	"

The Decatur, Dale, Preble, Yorktown and Marion, being small sloops, two sixty-eighths each would be a battery sufficient for them, their present battery consists of 16 canonades, useless at three quarters of a mile. The three store-ships, Erie, Lexington and Southampton, could each have one long sixty-eight, this would make them effective ships—the smaller vessels, I look upon as useless, and would recommend their sale, or substitute steamers for them. In case Congress should deem it proper to build and increase the Navy, frigates mounting 60 heavy guns, and sloops mounting, also, heavy guns, would be far preferable to Ships with a great number of guns and light batteries. A 68 pounder is at all times, equal to two 32 pounder guns, and there is less weight of metal in the one heavy gun, than in the two light ones combined. By building a class of 60 gun frigates, and 30 gun sloops-of-war, making the frigates to ton 2600, and the sloops 1300, at least, we will have a class of ship, equal to the largest size line of Battle ship in the British Navy, and a sloop-of-war, equal to their largest class frigates, and ships that will, from their draft of water, be enabled to enter our Southern ports, as the frigates will not draw over 21 feet water, and the sloops more than 15 feet. The draft of water on the Pensacola Bay is 22 feet.

The largest line of Battle ship, in the British Navy, is the Royal Frederick, mounting 110 guns, 32 pounders, and tons 3099.

The largest frigate in the British Navy, is the Constance, mounting 50 guns, 46. 32 pounder 4-8 in. tons 2126.

The following is the size and tonnage of English Line of Battle Ships:

Devonshire, 74 Guns, 1742 Tons. Dublin, 74 Guns, 1777 Tons. Edinburgh, 74 Guns, 1772 Tons. Their Frigates rated—Eurotus, 44 Guns, 1158 Tons. Forth, 44 Guns, 1215 Tons. Horatio, 44 Guns, 1090 Tons. Glendower, 36 Guns, 951 Tons.

The size of the American Line of Battle Ship and Frigates, are as follows:

Pennsylvania, largest, 140 Guns, 3300 Tons. Ohio, 80 Guns, 2800 Tons. Franklin, 74 Guns, 2700 Tons. Brandywine, 60 Guns, 1750 Tons. Raritan, 60 Guns, 1750 Tons. Constellation, 36 Guns, 1300 Tons. Sloop-of-War Jamestown, 20 Guns, 1000 Tons.

The largest steamer in the British Navy, is the Terrible, just launched. This vessel's engines are 800 horse power, 20 guns, 1847 tons.

The United States steamer Mississippi, is 450 horse power, mounting 8-8 in. 2-10 inch, and 1700 tons.

The crews of English Line of Battle Ships, are—

Vanguard, 80 guns, tonnage 2609. Officers and Men, 540. Marines, 150. Boys, 60—Total, 750.

Frigate Vernon, 50 guns, tonnage 2082. Officers and Men, 309. Boys, 47. Marines, 60—Total, 416.

Sloop-of-War Wolf, 18 guns, tonnage 450. Officers and Men, 96. Boys, 24. Marines, 20—Total, 140.

Of American, are—

North Carolina, 80 guns, tonnage 2750. Officers and Men, 750. Officers and Marines, 66—Total, 820.

Brandywine, 60 guns, 1750 tonnage. Officers and Men, 430. Officers and Marines, 50—Total, 480.

Sloop-of-War Jamestown, 20 guns, tonnage 1000. Officers and Men, 184. Officers and Marines, 26—Total, 210.

The above is a fair estimate of the different class ships, now in the American and British Navies. It will be perceived, the Vernon mounts *but fifty guns*, these guns are all long guns, 32 pounders. The Brandywine mounts sixty—

thirty of these guns are short guns, canonades—by the alteration in this ship, I propose to mount thirty 8 inch, 68 pounders, this would make her a far superior ship to the Vernon, although, at present, the Vernon is a superior class vessel to the Brandywine, and carries less men and officers.

The whole British Navy afloat, in 1845, taken from Haulton's List of the British Navy, is as follows:

Line of Battle Ships, 18. Frigates, 19. Sloops, Brigs, Yachts, &c., 105. Steam Vessels of all classes, 52—Total, 194.

Building in Dock and Ordinary —Ships, 86. Frigates, 78. Sloops, Brigs, Yachts, &c., 87. Steam Vessels of all classes, 46—Total, 297.

Total building, in Dock, Ordinary and afloat, 493. The estimates of the Department, call for the increase, in building for the Navy, of 12 frigates with sails, and two frigates with steam—of five sloops with steam, and nine with sails. Let us then suppose these frigates and sloops mount the guns here proposed.

12 Frigates,	(each)	60	Guns,	68	pounders,	would be	720. 68.	Equal to	1440. 32	pounder,
2 Frigates with 8 in.		60	"	68	"	"	120. 68.	"	240. 32	"
9 Sloops,	"	20	"	68	"	"	180. 68.	"	360. 32	"
5 do. with steam,		20	"	68	"	"	100. 68.	"	200. 32	"

Add the ships already in the Navy altered, as proposed, and we have—

9	Ships, mounting	60. 68	pounders.	Equal to	540. 68.		1080. 32.
1	"	100. 68	"	"	100. 68.		240. 32.
1	"	50. 68	"	"	50. 68.		100. 32.
9	"	30. 68	"	"	270. 68.		540. 32.
1	"	18. 68	"	"	18 68.		36. 32.
4	"	10. 68	"	"	40. 63.		80. 32.
1	"	12. 68	"	"	12. 68.		24. 32.
3	"	14. 88	"	"	42. 68.		84. 32.
1	"	8. 98	"	"	8. 68.		16. 32.
3	"	1. 68	"	"	1. 68.		2. 32.
61					1702. 68.	Equal to	3404. 32.

We, therefore, find by this estimate, that 61 vessels, mounting in all, 1702. is equal to 120 vessels, mounting 3404 light guns, or thirty-two pounders. The British Government have afloat 194 vessels, 105 of these vessels are sloops-of-war, brigs, schooners, store-ships and yachts—the sloops mount not over 18 guns, some ten, and others, but 8—the brigs and schooners do not exceed ten guns, and mount as low as six—the yachts are not armed—the 52 steamers range from 2000 tons to 90, and mount from 20 guns down to none, many of them are small vessels, used as tugs to tow ships in and out of port. The 18 line of battle ships, mount from 100 to 72 guns, thirty-two pounders—the frigates, 19 afloat, mount 18, 24 and 32 pounders. Calculating the force of the British Navy afloat, at 2592 guns of all calabres. Let us suppose, she can increase this force one third, that nation would have afloat 3456 guns—a force, which is necessary, to have scattered throughout the globe. It will, therefore, be perceived, that 1702 guns of heavy calibre, is very near equal to the whole force of the British Navy afloat While such class ships as is herein proposed, would roam the ocean at large—the vessels of an enemy would have to sail in large squadrons, or go in couplets. This would leave their commerce open to destruction, or it would compel the British to commence an expensive alteration of their *Whole Navy*, which, within itself, would defer a war, at least, twenty years, if not altogether. These style ships would be more economical, and require fewer officers and men, than the present style of vessel. Below is a comparison of the Brandywine, as she now stands, with the proposed alteration.

Brandywine, at present, Officered and Manned.—1 Captain. 6 Lieutenants. 1 Master. 1 Surgeon. 1 Purser. 2 Pass or Assistant Surgeons. 12 Midshipmen. 4 Forward Officers. 1 Clerk to Captain. Clerk to Purser. Petty Officers and Crew, 401. Marines, 50.

By proposed alteration.—1 Commander or Captain. 4 Lieutenants. 1 Master. 1 Surgeon. 1 Purser. 1 Pass or Assistant Surgeon. Passed and other Midshipmen 8. Forward Officers 4. Petty Officers and Men, 190. Marines, 30. This system of economy of officers and men, could be carried out, throughout the service, nor need there be added to it another officer, and a very few sailors, and no marines.

I have here alluded altogether to sailing vessels, the style of ship, but not their cost. A cost of a merchant ship is about 67 dollars per ton without finish—under three hundred tons, over that, it increases about ten per cent. In building a man-of-war, 100 dollars per ton is considered about a fair average, and in building steamers, 1000 dollars per horse power of their engines, is allowed in England.

Steam Vessels—Wood and Iron.

The number of Gimcracks now before the world, in the shape of Propellers, are legion. I will here only notice two, the two most prominent. Ericsson's and Loper's. These propellers have been applied to the following vessels, viz: The Tigress, Republican, Massachusetts and Marmon. The first of these vessels was towed into New York, by the Mutual Safety. The second was twenty-two days to New Orleans. The third proved a failure in her passages across the Atlantic, and the fourth was lost in the Pass of Sera, in consequence of the impossibilty of her propeller working off a Lee shore. The Great Britian has made four passages across the Atlantic, average 20 days in her last inward and outward passage, she broke her archimedean screw. The Cunard Line has made upwards of an hundred passages across the ocean without an accident, and have always beaten the Great Britian, by a thousand miles. These are facts, which require no comments. The Water Witch, a public vessel, built for Hunter's propellers, made an average passage of 8½ miles per hour, from Washington to Norfolk. These propellers were removed, and Loper's applied. With the last named propeller, (Loper) she made an average passage of 2½ miles per hour. The Union made a passage from Norfolk to Pensacola, cruised around the Gulf of Mexico, was three years in commission without an accident. The Princeton first had applied Ericsson's propeller, abandoned it, and then adapted Loper's, and is now a hulk at the New York Navy Yard. The advantages possessed by Iron vessels are, they are more healthy than wood—more buoyant, and can be constructed better models. Their disadvantage is, that their bottoms soon becomes covered with shell-fish, and it will be necessary to have a dry-dock, or floating dry-dock in every port.

If Iron vessels were coppered, a galvanic action would soon take place, and the iron would be the sufferer. The adhesion of testaceous or shell-fish, is not confined to any particular substance, the large fish of the ocean are subject to have them attached, but nature, that kind mother, has made provision for the whale. Nar fish and black fish, they slough their outer skin periodically, or else they would become so encrusted with shell-fish, that it would be impossible for them to move. With us, Art must perform the Work of Nature.

Henke.
Lon Mathm
M. C